

# NAMAN YESHWANTH KUMAR

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## EDUCATION

### Master of Science

Arizona State University - Computer Eng (GPA 3.8/4.0)

Expected: May 2026

Tempe, AZ

- Relevant course work: Artificial Intelligence, Reinforcement Learning in Robotics, Foundations of Algorithms, Perception in Robotics, Advanced Computer Architecture, Hardware Co-design, SoC Design, VLSI

### Nanodegree - Self-Driving Car Engineer

February 2023

Udacity

- Key Areas: Machine Learning, Sensor Fusion, Computer Vision, Path Planning, and Control, with hands-on projects in object detection, trajectory tracking, and autonomous vehicle motion

### Bachelor of Engineering

BMS College of Engineering - Electrical and Electronics Eng

June 2022

Bengaluru, India

## TECHNICAL SKILLS

**Machine Learning & AI:** Machine Learning | Data Analytics | Computer Vision | TensorFlow | PyTorch | NumPy | Pandas | Scipy | Reinforcement Learning

**Programming Languages:** Python | C++ | MATLAB | JavaScript | SQL | Shell Script | Bash

**Cloud & Development Tools:** AWS Lambda | S3 | Docker | Git | Virtual Environments | Linux | Jupyter | Plotly | Object-Oriented Programming

**Hardware & Systems:** Raspberry Pi | Arduino | ARM | ROS | ROS 2 | Simulink | CoppeliaSim | LTspice

## WORK EXPERIENCE

### Software Developer

NCR GOLD

October 2022 - April 2024

Bengaluru, India

- Designed and deployed a custom ordering platform (Django) with automated data pipelines to streamline inventory and billing; processed 10,000+ orders using object-oriented programming best practices.
- Containerized applications using Docker, implemented test harnesses for validation, and integrated AWS cloud deployment with performance monitoring.

### Research Intern

Indian Institute of Science

October 2021 - August 2022

Bengaluru, India

- Led the Propulsion Circuit Team, optimizing a 1.5kW axial flux BLDC motor with Ansys Maxwell; boosted efficiency by upgrading material designs and implementing baseline models for FOC system validation.
- Conducted research on speed control algorithms and battery management systems for eVTOL aircraft using Simulink and research literature; improved efficiency through systematic algorithm comparison.

## PROJECT EXPERIENCE

### Trezzit - Full Stack Bill Splitting Application

February 2025 - Present

- Engineered Trezzit, a full-stack expense management application that solves the dual challenges of intuitive item-wise bill splitting and integrated personal finance tracking using AI-powered categorization.
- Managed the complete project lifecycle, acquiring and supporting an initial beta community of 120+ active users from the ASU student body.
- Currently leading the next phase of growth, focused on scaling the user base to 1,000 members on campus by leveraging iterative development and community feedback. Tech Stack: Django | React | Google Generative AI (Gemini) | Material-UI | Docker

### Intel Automated Self-Checkout (Open Source Contributor)

January 2025 - February 2025

- Developed a framework in Python to publish and analyze LiDAR sensor data for autonomous checkout systems; successfully merged contributions to the main branch after comprehensive code review.
- Leveraged Docker and CI/CD pipelines, collaborating with a distributed team to enhance sensor fusion accuracy.

### Raspberry Pi Self-Driving Car

February 2022 - July 2022

- Developed an autonomous vehicle using Raspberry Pi and Arduino, featuring lane detection, traffic sign recognition, and seamless integration via the I2C communication protocol.
- Streamlined data collection and neural network training with a Bluetooth joystick mode in a collaborative team effort; project received the Best Project Award in the EEE Department among approximately 40 submissions.

## AWARDS & HONORS

- Won the 'Best Use of AI' award at Strategy X DevHacks'25 at ASU for developing AdaptED AI, a platform leveraging Google's Gemini AI to generate personalized learning paths and resources for students.
- Secured second place in the Hack SoDA 2024 at ASU with a team of four, developing PassGen, a secure and offline Chrome Extension for generating unique passwords, during a 24-hour hackathon sponsored by Amazon.
- Ranked among the Top Ten teams in the e-Yantra national-level robotics competition organized by IIT Bombay, for designing and developing a self-balancing dairy bike on CoppeliaSim, February 2022.